



Amendment to the Claims:

1(currently amended): A cleaning device for underwater vacuuming of debris from structural surfaces such as the bottom of swimming pools or other water bodies and comprises a substantially closed housing formed by wall means and providing a suction cavity, a debris-water feed inlet extending thru said wall means into said cavity and adapted to be moved with said device along said surfaces in proximity thereto, a debris-water discharge conduit extending thru said wall means and having an exit end surrounded by a filter container exterior to said housing for entrapping said debris, said conduit having a free flow axis and an entry end opening into said cavity, a fluid ejector tube mounted in said cavity and extending thru said wall means and having a flow axis, a fluid inlet port on a distal end portion of said tube and adapted for connection exteriorly of said cavity to a source of high pressure fluid, said source being exterior to said cavity, said tube further having a fluid ejector end located within said cavity, said ejector end being spaced from said entry end of said conduit and thus providing a debris entry gap communicating with said entry end, the tube flow axis and the conduit flow axis being in substantial alignment, and wherein the flow area of said conduit is at least about twice the flow area of said tube, whereby when a fluid stream is ejected from said discharge end and across said gap and thru said conduit and into said container the pressure within said cavity will be reduced sufficiently to suck water-debris from said surfaces up to and into said stream for transport into said container without the inlet of said tube and source being exposed to said debris[.] wherein the flow area of said conduit is from about five to about twelve times the flow area of said tube, wherein said ejector end of said tube is spaced in said

cavity from about one to about three inches from said entry end of said conduit, wherein the flow area of said conduit is from about 1.0 in² to about 2.0 in², wherein the flow area of said tube is from about 0.1 to about 0.4 in², wherein said fluid is water, wherein said high pressure fluid source comprises a water pump having a water feed inlet located outside of said housing, and wherein the operational flow rate of said pump is from about 500 to about 1,000 gal./hr.

2(canceled):

3(canceled):

4(canceled):

5(currently amended): The device of claim [[4]] 1 wherein the volumetric water capacity of said cavity is from about 800 to about 1800 ml.

6(previously presented): The device of claim 1 wherein said ejector end of said tube is spaced in said cavity from about 1.5 to about 2.0 inches from said entry end of said conduit, wherein the flow area of said conduit is from about 1.5 to about 2.0 in², wherein the flow area of said tube is from about 0.1 to about 0.15 in², wherein said fluid is water, wherein said high pressure fluid source comprises a centrifugal water pump mounted on said housing and having a water feed inlet located outside of said housing, and wherein the operational flow rate of said pump is from about 500 to about 1,000 gal./hr.

7(currently amended): The device of claim [[4]] 1 wherein said filter container comprises a flexible mesh fabric bag having from about 150 μ to about 250 μ size openings.

8(previously presented): The device of claim 6 wherein said pump is battery operated at between about six and fourteen volts, and wherein said battery is electrically connected to said battery thru elongated handle means

affixed to said housing and adapted to extend above a swimming pool edge for maneuvering of said device along a pool surface by an operator outside of said pool.

9(previously presented): The device of claim 1 wherein elongated fluid conduit means is connected at its one end to said inlet port and is adapted for connection at its other end to a high pressure fluid source located exteriorly of a water body.

10(previously presented): The device of claim 9 wherein said conduit means comprises a garden type hose.

11(previously presented): The device of claim 9 wherein said conduit means comprises a compressed air hose.

12(previously presented): The device of claim 9 wherein said conduit means is supported by elongated handle means having one of its ends affixed to said housing.

13(canceled):

14(new): A cleaning device(10)for underwater vacuuming of debris (11) from structural surfaces (12) such as the bottom of swimming pools or other water bodies and comprises a substantially closed housing (14) provided by wall means (16) which is formed to provide an upstream suction cavity (18), for opening into a water body thru a rim (22) defining a debris-water feed inlet (20) adapted to be brought into close proximity to a structural surface to be cleaned, and to provide a debris-water discharge conduit (26) downstream of said suction cavity and having an open exit end (28) which is surrounded by a debris container (30) positioned exteriorly of said housing (14) for entrapping said debris (11) carried into said container by debris-water discharge stream (52), said discharge conduit (26) having a flow axis (34) and an entry end portion (32) opening into said suction cavity

(18), a fluid ejector tube (40) mounted thru said wall means (16) and having a distal end portion extending exteriorly of and outwardly from said housing and providing a high pressure water inlet (44), said ejector tube (40) having an ejector end portion (48) extending into said suction cavity (18) within said housing, said ejector tube (40) having a flow axis (42) substantially in alignment with the flow axis (34) of said discharge conduit (26), said inlet (44) being connected to a high pressure water source located exteriorly of said housing and upstream of said debris-water discharge stream (52) and communicating with stream (52) only thru ejector tube (40) whereby said discharge stream (52) cannot flow towards or into the proximity of said high pressure water source, said ejector end portion (48) being spaced from said entry end portion (32) of said discharge conduit (26) and thus providing a debris-water entry gap (50) communicating with said entry end portion (32), and wherein the flow area of said discharge conduit (26) is at least about twice the flow area of said ejector tube (40), whereby when a fluid stream is ejected from said ejector nozzle (48) and across said gap (50) and out thru said discharge conduit and into said container the pressure within said suction cavity will be reduced sufficiently to suck debris-water from said structural surfaces up to and into said stream (52) for transport out into said container without the inlet port (44) of said ejector tube and the high pressure water source (46) being exposed to any surface debris either outside of said housing (14) or within said suction cavity or within said discharge conduit.

15(new): The device of claim 14 wherein said ejector end portion of said tube is spaced along said axes (34, 42) in said cavity from about one to about three inches from said entry end portion of said discharge conduit, wherein the flow area of said conduit is from about 1.0 in² to about 2.0 in²,

and wherein the flow area of said ejector tube is from about 0.1 to about 0.4 in².

16(new): The device of claim 15 wherein said high pressure fluid source comprises a water pump (46) having a water feed inlet located outside of said housing and spaced above said inlet rim (22), and wherein the operational flow rate of said pump is from about 500 to about 1,000 gal./hr.

17(new): The device of claim 16 wherein the volumetric water capacity of said suction cavity is from about 800 to about 1800 ml.

18(new): The device of claim 14 wherein said ejector end of said tube is spaced in said cavity from about 1.5 to about 2.0 inches from said entry end of said discharge conduit, wherein the flow area of said conduit is from about 1.5 to about 2.0 in², wherein the flow area of said tube is from about 0.1 to about 0.15 in², wherein said fluid is water, wherein said high pressure fluid source comprises a centrifugal water pump mounted on the outside of said housing and having a water feed inlet located outside of said housing, and wherein the operational flow rate of said pump is from about 500 to about 1,000 gal./hr.

19(new): The device of claim 16 wherein said debris container comprises a flexible mesh fabric bag having from about 150 μ to about 250 μ size openings.

20(new): The device of claim 18 wherein said pump is battery operated at between about six and fourteen volts, and wherein said battery is electrically connected to said battery thru elongated handle means affixed to said housing and adapted to extend above a swimming pool edge for maneuvering of said device along a pool surface by an operator outside of said pool.